



MISSOURI DEPARTMENT OF NATURAL RESOURCES

Prohibition of Yard Waste in Landfills and Composting Facility Guidelines

Technical Bulletin
09/1997

Division of Environmental Quality
Solid Waste Management Program

This technical bulletin addresses yard waste banned from landfills after Jan. 1, 1992, by Section 260.250, RSMo, permitting requirements for centralized yard waste composting facilities and site selection guidelines for centralized yard waste composting facilities.

Note: This bulletin contains composting information for yard waste only. For information about composting municipal solid waste, sewage sludge, agricultural wastes or other materials, please contact the Missouri Department of Natural Resources (DNR), Solid Waste Management Program (SWMP), P.O. Box 176, Jefferson City, MO 65102, (573) 751-5401 or (800) 361-4827.

Introduction

In 1990, the Missouri Legislature passed legislation, Senate Bill 530 designed to encourage county cooperation and local responsibility in order to achieve a 40 percent reduction in the amount of solid waste disposed of in Missouri landfills by 1998. This is to be accomplished through recycling, resource recovery, waste reduction and market development for recovered materials. Since yard waste comprises such a large percentage of the volume of solid waste being generated, approximately 18 to 20 percent, and possibly destined for landfilling, and because it has an available, beneficial use, it is prohibited from being disposed of in Missouri landfills after Jan. 1, 1992.

Definitions

Yard Waste - Leaves, grass clippings, yard and garden vegetation and Christmas trees. The term does not include stumps, roots or shrubs with intact root balls. The DNR interprets the definition of yard and garden vegetation to include shrubs, vegetable and flower garden waste, brush and trees produced by plant nurseries, greenhouses and similar operations that grow or produce plants, trees, flowers or shrubs. Yard waste also includes the plant waste generated or collected by private, public or commercial lawn care, landscaping, tree-trimming and plant-care services. Compost produced from yard waste is also considered to be yard waste and may not be disposed of in a landfill.

Excluded - Yard waste does not include waste generated in the production of decorative or ceremonial items such as wreaths, flower arrangements, corsages or casket sprays or the decorative items themselves. Tree trunks or limbs which have a diameter greater than six inches are not regulated as yard waste at this time.

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It is anticipated and recommended by the department that most yard wastes will be composted. In addition to composting, there are other beneficial uses for woody yard wastes and for tree trunks and limbs over six inches in diameter. These woody materials may be used for firewood, as wildlife habitat and to make wood chips. Wood chips are used as mulch in landscaping, as a base for playgrounds, as a work surface for composting, in compost as a bulking agent and as covering material for paths and walkways in nature areas and parks.

Solid Waste Disposal Area - Any area used for the disposal of solid waste from more than one residential premises or one or more commercial, industrial, manufacturing, recreational or governmental operations.

Permitting Requirements

Solid Waste Permits:

Facilities that compost a source-separated material do not require a solid waste permit provided they do not create pollution, cause a public nuisance or adversely affect public health.

Yard waste composting operations may be carried out in conjunction with activities at currently permitted solid waste disposal areas as long as such operations are not conducted in areas where fill has been placed or in areas necessary for normal landfilling operations. Prior to commencement of actual composting activity at a solid waste disposal area, the owner or operator must notify the DNR/SWMP in writing of their intent to do so. The mailing address is Missouri Department of Natural Resources, Solid Waste Management Program, P.O. Box 176, Jefferson City, MO 65102, (573) 751-5401. If a landfill wishes to compost on filled portions, a permit modification will be required from the SWMP.

Water Quality Permits:

Permits under the Missouri Clean Water Law, Chapter 644, RSMo, and regulations 10 CSR 20 chapter six, may be required for centralized yard waste composting operations. Water quality permit requirements are based on the surface area of the yard waste composting site. A facility that already has an individual (site-specific) operating permit may obtain a modification to the permit to include yard waste composting.

If a yard waste composting site is less than two acres, no permit is required as long as there is no discharge of water other than stormwater. Sites having more than two and less than five acres require a general operating permit for operation. The fee for this permit is \$150. Yard waste composting sites five acres or larger require a construction permit and individual (site - specific) operating permit. The fees for these permits are \$500 for the construction permit and \$1500 per year for the operating permit.

The size of the site described above is measured by calculating the area that is within the composting perimeter including unloading, storage and handling of composting materials and finished compost. It does not include buffer zones, parking lots, maintenance facilities and storm water control basins.

An individual (site-specific) permit will be required if sewage sludge, agricultural wastes or other solid wastes are intended to be composted at the site, regardless of the size of the site. One possible exception is if the compost contains less than 5 percent sludge or animal wastes and is less than two acres. (See 10 CSR 20 - 6.015.)

Additional information may be obtained from the Missouri Department of Natural Resources', Water Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, (573) 751-6825.

Other Permits or Approvals:

Depending on how it is labeled, composted yard waste may be regulated under the provisions of the Fertilizer Law (Section 266.291, RSMo) or the Soil Conditioner Law (Section 266.361, RSMo), and other factors.

More information on this subject may be obtained from the Fertilizer Control Services Division of the Agricultural Experiment Station, University of Missouri, Columbia, MO 65211, (573) 882-0007 or the Plant Industries Division of the Missouri Department of Agriculture, 1616 Missouri Blvd., Jefferson City, MO 65102, (573) 751-2461.

Local Permits:

Local requirements, such as zoning, conditional use permits, land use planning, city or county ordinances, rules, regulations or standards and approvals and permits or licenses may be required, in addition to those described above. For more information, contact the local city or county government.

Site Selection Guidance:

Selecting the most appropriate location for a composting facility is extremely important and should be done only after careful consideration of the factors outlined below. Since each situation is unique, this information is offered for general guidance and is not intended to be conclusive. Potential sites may be evaluated and compared based on the following information:

- Traffic flow patterns.
- Topography and geology, including drainage patterns, slopes and depth to water table.
- Accessibility from major roadways.
- Prevailing wind direction at the site.
- Distances to houses, schools, businesses, etc.
- Distances to wetlands and streams.
- Size of site relative to current and future needs, including space for adequate buffer zones.
- Travel distances for haulers or residents.
- Availability of utilities such as water, sewers or electricity.
- Safety, security and liability aspects of the site.

Public acceptance and support for a compost site is critical to program success. Consideration must be given to public concerns in selecting a site. Active citizen involvement in the siting process and an effective public information campaign will enhance public acceptance of the facility. If problems such as odors, flies or runoff develop, complaints from the public, as well as potential health and environmental impacts, should be anticipated. Adequate buffer zones may help minimize problems until they can be corrected.

Further Information:

Detailed information on the siting, development and operation of centralized yard waste composting facilities is available through the MDNR. For additional information, please contact the appropriate MDNR Regional Office (see map).

Additional information on centralized yard waste composting is available from the Environmental Improvement and Energy Resources Authority (EI ERA), P.O. Box 744, Jefferson City, MO 65102-0570, (573) 751-4919.

A summary and assessment of eight yard waste composting programs is included in the Environmental Protection Agency publication, *Yard Waste Composting*. The booklet is available from the National Technical Information Service (NTIS) as publication #PB90/163/114, (800) 553-6847.

Two brochures are available for the homeowner that wants to manage their own yard waste. The brochures discuss lawn management techniques to minimize waste production and explain how to compost yard waste.

The *Homeowners Composting Guide* is available from the EIERA, P.O. Box 744, Jefferson City, MO 65102, (573) 751-4919.

Don't Bag It - How to Recycle Your Grass Clippings, Leaves and Branches is available from the county extension offices of the University of Missouri.

For more information call or write:

Missouri Department of Natural Resources

Solid Waste Management Program

P.O. Box 176, Jefferson City, MO 65102-0176

1 (800) 361-4827 or (573) 751-5401 office

(573) 526-3902 fax

(<http://www.state.mo.us/dnr/deq/swmp/homeswmp.htm>) Program Home Page